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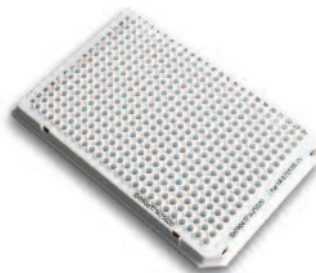
ISO 17025 Accreditation for CYCLERtest®'s CelsiusLabs™ (q)PCR cyler calibration

CYCLERtest®'s calibration department (CelsiusLabs) in The Netherlands was ISO17025 Accredited in April 2009. The accreditation scope is for on-site calibrations of (q)PCR cyclers, regardless of brand and model, also for temperature calibrations of self indicating thermometers and more specifically MTAS® and Driftcon® systems and fixtures. Laboratories performing PCR (Polymerase Chain Reaction) or qPCR (quantitative Polymerase Chain Reaction) and complying to ISO 17025, ISO 15189, CAP, ASHI, NY-state, CCKL, ASCLD/LAB or to regulations related to EA, ILAC or IAF are now able to ISO 17025 calibrate and validate their (q)PCR cyclers. Continues at page 2.



ISO17025 Accredited
From left to right; Marc Verblakt, Team Leader GENO-tronics, Ad Lambrechts from the Dutch Counsel for Accreditation, Tom Hendrixx CEO, CYCLERtest® & GENO-tronics.

New Release. 384 Well (q)PCR plates for Roche & ABI cyler



BIOplastics has released (June 2009) its new 384 well (q)PCR plates. The plates are not only extreme uniform but are also designed to fit Roche IC 480 as well as ABI and Bio-Rad (q)PCR cyclers. All plates incorporates BIOplastics' latest BPLPM technology ensuring superior performance, reproducibility and marking performances. Continues at page 6.

FDA selects Driftcon® for their (q)PCR cyler calibrations

The Food Diagnostic section of FDA (Food and Drug Administration) in the USA decided in 2008 that their regional labs, would incorporate CYCLERtest® Driftcon® systems for verification, validating and calibrating all of their (q)PCR cyler units. The San Francisco District Laboratory of the U.S FDA initiated the use of the CYCLERtest® calibration service. In the USA the service is provided by BPCTi Inc., subsidiary of the Dutch manufacturer BIOplastics and its sister company CYCLERtest®.

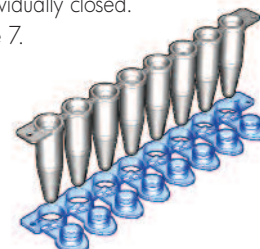
The food sections of the FDA typically use ABI 9700 and Cepheid Smartcyler units in their labs. In Q3, at the bi-annual meeting in 2008, the Driftcon® system was selected based on superior performance and value. For reasons of direct accessibility of Driftcon® systems and its instant usages, the Driftcon® system was preferred over the calibration services for routine validations. A number of labs are still going to use the MTAS® services next to the routinely used Driftcon® calibrations. In January 2009 the first labs attended the Driftcon® user training in Durham, North Carolina, home of the BPCTi facilities.



Some of the pictured U.S FDA participants at the Driftcon® user training from January 2009.

New Release. Click-on Cap™ Strip allows individual cap closure of (q)PCR tube strips

One of the latest developments of BIOplastics is the Click-on Cap™ Strip which allows individual closure of (q)PCR tube strips. Limiting cross contamination and the possibility of signal enhancement in Real Time PCR are 2 highly valued features that benefit users. It enables the use of white strip tubes combined with clear caps which can be individually closed. Continues at page 7.



ISO 17025 .. Continuation of page 1.

CYCLERtest BV, a privately owned company was accredited by the Dutch Council of Accreditation (RVA). The RVA is member of the European co-operation for Accreditation (EA) and signatories to the ILAC Arrangement. (The International Laboratory Accreditation Cooperation as well as IAF (INTERNATIONAL ACCREDITATION FORUM). The equipment, technology, and software for executing calibrations and calibration services were developed by CYCLERtest®'s sister company GENO-tronics BV.

Tom Hendrixx, CEO of CYCLERtest BV, GENO-tronics BV and BIOplastics BV is extremely pleased with the accreditation and stated: It was back in 1995 when our GENO-tronics engineering team was instructed to design superior hardware and software to enable accurate, multi channel measurements for full monitoring of all variables in PCR cyclers. We are proud that we achieved this unique milestone which benefits accredited laboratories and others in the marketplace, and extremely proud of our team for their continued developments and innovations.

It is very special to us since we are not only the first company in the world receiving accreditation for this application service, but that we also designed all of the hardware and software for it.

CYCLERtest® ISO17025 accredited calibration facility CelsiusLabs™ calibrates MTAS® and Drifcon® systems, designed solely for (quantitative) thermal cycler calibrations and validations. CYCLERtest® operates completely independent of any (q)PCR cycler manufacturer.

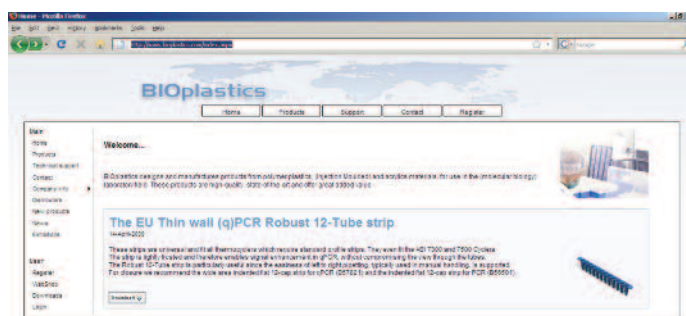
More information can be found at www.rva.nl.

BIOplastics website with online shopping facility.

In April 2009, BIOplastics has launched its new website. The website not only offers a webshop facility but data is directly linked to the central product database. The maintenance efficiency is high and the website is actually updated every 2 hours!! Latest products announcement releases, as well as prices are directly accessible.

We encourage you to register on our website so you can receive new product release information.

www.bioplastics.com



Chinese government in consultation with CYCLERtest.

The Chinese government, by means of the National Institute of Metrology, is in discussions with CYCLERtest® headquarters in the Netherlands as well with its Chinese Subsidiary to set up legislation for calibrating (q)PCR cyclers used in Diagnostic Procedures.

In 2008 CYCLERtest® and its sister company BIOplastics, opened their Chinese subsidiary, BPCTi China (Hendrixx Ltd) located in Shanghai. Although negotiations were already ongoing with the Shanghai Metrology Institute, the start-up of a CYCLERtest® subsidiary in China has accelerated the negotiation to the Highest Chinese Level.

Cases as SARS, the melamine scandal and the recent H1N1 virus, as well as the fact that (q)PCR cyclers are not sufficiently calibrated, have consequently contributed to enforce Legislation for (q)PCR cyles and its procedures when used in diagnostics applications.

Despite the fact that a number of Chinese labs affiliated with some, USA or Europe based, regulations (EFI, ASHI, CAP, NYstate) the National Institute of Metrology prefers to set-up one appropriate and "state of the art regulation" which can be used by all labs performing diagnostics while using the popular PCR or qPCR methodology.



Chinese National Institute of Metrology directors (right) in discussion with Tom Hendrixx, CEO, CYCLERtest BV, The Netherlands and Ching Gao, Director of BIOplastics CYCLERtest Inc. USA.

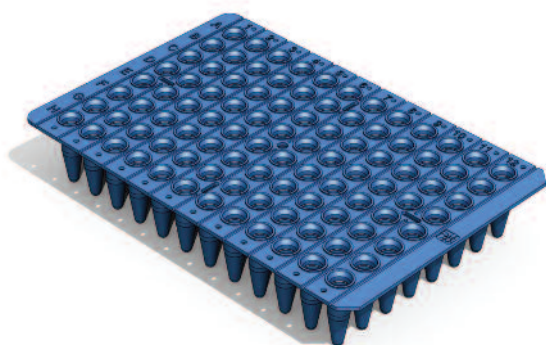
New Release. Breakable and cuttable (q)PCR plate

Recently BIOplastics released its new breakable and cuttable plate. These plates are universal and fit all thermocyclers which require standard profile products. The non skirted version also fits ABI 7300 and 7500 cyclers and sequencers. So one type of plate can serve about 90% of the thermocycler market! The plates are breakable at temperatures < 4°C.

The plates are lightly frosted to enable signal enhancement in qPCR, but still allows the contents of the tubes to be viewed. Closure can be achieved by using any of the BIOplastics cap strips. The wide area indented flat 8-cap strip (B57801) or OptiSeal™ is recommended .

Breakable plates are available in semi skirted (B50651) as well as non skirted (B50501) versions. Samples of the breakable, cuttable, colored code-able (q)PCR Plates are available on request.

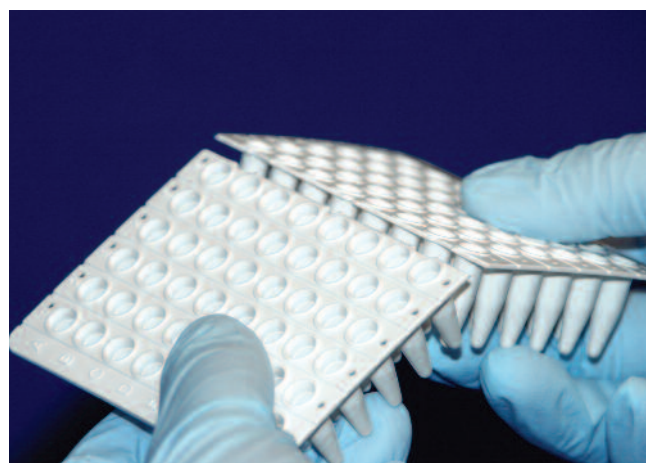
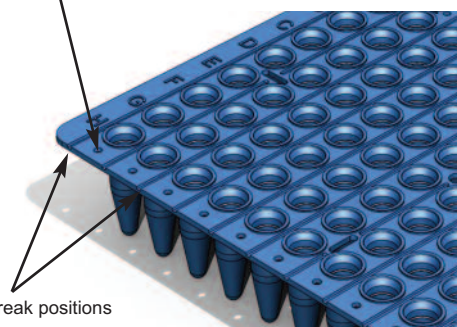
More information can be found at: www.bioplastics.com.



light frosted surface enables signal enhancement in qPCR

Orientation & "click" hole

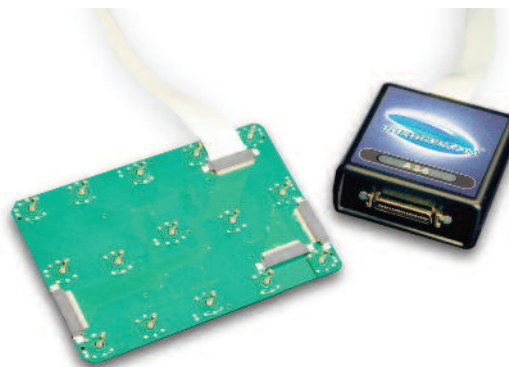
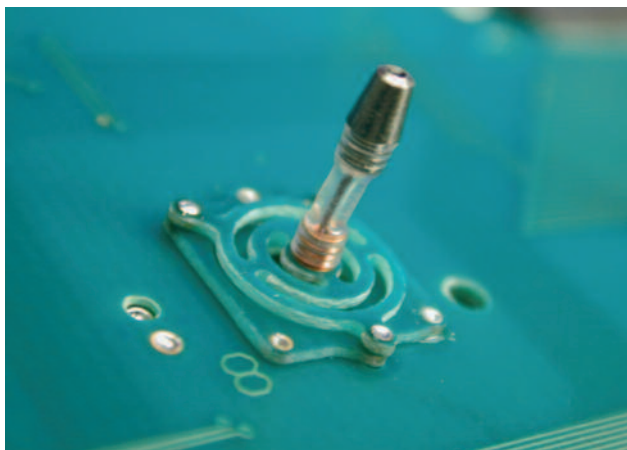
Cut and break positions



Driftcon® 384 well calibration for Roche, ABI & Bio-Rad cyclers

CYCLERtest® recently (May, 2009) released its latest product Driftcon® FFC 384-15 system which enables end-users to calibrate and validate any 384 block type (q)PCR cycler. Driftcon® FFC systems (www.driftcon.com) are equipped with a minimum of 15 sensors and consists of a hardware box, software and a "probe fixture FFC", which has PCR plate dimensions . The fixture also houses processing electronics and calibration values. The Driftcon® FFC fixture is added to the Driftcon® range of fixtures and can be used in any closed (q)PCR system using 384 plate formats. Acquisition and analyses are monitored by means of the Driftcon® software. To use in a Roche LC 480 or ABI 7900 a specific adaptor is required.

More information can be obtained by downloading the release flyer at: www.cyclertest.com



Cycler to Product Chart

	Product	Single Tubes							8 & 12 Tube Strips									
		C78401	CF79401	B79401	B79001	B/C79801	B77201	B77301	CF(A)79601	CF78601	B79901	B79601	B72711	B76601	B69901	B56601	B77101	B77001
Cyber		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP
ABI																		
2400	RP	V	V	V	V	X	X	V	V	V	V	X	X	X	V	X	V	X
2700	RP	V	V	X	X	X	X	V	V	V	V	X	X	X	V	X	V	X
2720	RP	V	V	X	X	X	X	V	V	V	V	X	X	X	V	V	V	X
5700	RP	V	V	X	X	X	X	V	V	V	X	X	X	V	V+	V	V	X
7000	RP	V	V	X	X	X	X	V	V	V	X	X	V	V+	V	V	V	X
7300	RP	X	X	X	X	X	X	V	V	X	X	X	X	V+	V+	V+	V	X
7500	RP	X	X	X	X	X	X	V	V	X	X	X	X	V+	V+	V	V	X
7500 Fast	LP	X	X	X	X	X	V	X	X	X	Va	V	Va	X	X	X	X	Va
7700	RP	V	V	V	X	X	X	V	V	V	X	X	X	V+	V+	V	V	X
7900	RP	X	X	X	X	X	X	Va	X	X	X	X	X	V+	V+	Va	X	X
7900 Fast	LP	X	X	X	X	X	V	X	X	X	Va	X	Va	X	X	X	X	Va
9600	RP/HP	V	V	V	V	X	V	V	V	V	V	X	V	V	V	V	V	V
9700	RP	V	V	X	X	X	X	V	V	V	X	X	X	V+	V+	V	V	X
9800 Fast	LP	X	X	X	X	X	V	X	X	X	V+	V+	V+	X	X	X	X	V
StepOne	LP	X	X	X	X	X	V	X	X	X	V	V	V	X	X	X	X	V
StepOne Plus	LP	X	X	X	X	X	V	X	X	X	V	V	V	X	X	X	X	V
Veriti	RP	V	V	X	X	X	X	V	V	V	X	X	X	V+	V+	V	V	X
Veriti Fast	LP	X	X	X	X	X	V	X	X	X	V	V	V	X	X	X	X	V
Biometra																		
Personal	MP 48	V	V	V	V	V	V	V	V	V	V	V	V	X	V	V	V	V
11	MP	V	V	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V
1gradient	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
13000	MP	V	V	V	V	V	V	V	V	V	V	V	V	X	V	V	V	V
1professional	MP	V	V	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V
1robot	MP	V	V	V	V	X	V	V	V	V	X	X	X	V	V	V	V	V
BioRad																		
GeneCycler	RP	V	V	V	V	X	X	V	V	V	X	X	X	V+	V	V	V	X
iCycler	RP	V	V	V	V	X	X	V	V	V	X	X	X	V+	V+	V	V	X
iCycler IQ	RP	V	V	V	V+	X	X	V	V	V	X	X	X	V+	V+	V	V	X
IQ5	RP	V	V	V	V+	X	X	V	V	V	X	X	X	V+	V+	V	V	X
MyCycler	RP	V	V	V	V+	X	X	V	V	V	X	X	X	V+	V+	V	V	X
MylQ	RP	V	V	V	V+	X	X	V	V	V	X	X	X	V+	V+	V	V	X
Ptc-100	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Ptc-150	MP	V	V	V	V	V	V	V	X	X	X	X	X	X	X	V	V	V
Ptc-200	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Ptc-225	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Opticon	LP	X	X	X	X	X	V	X	X	X	V+	V+	V+	X	X	X	X	V
Opticon2	LP	X	X	X	X	X	V	X	X	X	V+	V+	V+	X	X	X	X	V
MiniOpticon	MP	V	V	V	V+	X	V	V	V	V	V+	V+	V+	V+	V	V	V	V
Chromo4	MP	V	V	V	V+	X	V	V	V	V	V+	V+	V+	V+	V+	V+	V+	V
C-1000	LP	X	X	X	X	X	V	X	X	X	V+	V+	V+	X	X	X	X	V
S-1000	LP	X	X	X	X	X	V	X	X	X	V+	V+	V+	X	X	X	X	V
CFX96	LP/RP	V	V	V	X	X	V	X	V	V	V+	V+	V+	V	V	V	V	V
CFX384		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Eppendorf																		
MasterCycler	MP	V	V	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V
MC Gradient	MP	V	V	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V
MC ep Gradient	MP	V	V	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V
MC ep Gradient S	MO	V	V	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V
MC ep Realplex	RP	V	V	V	V+	X	V	V	V	V	V	V	V	V	V	V	V	V
MC Personal 16		X	X	X	X	V	V	V	X	X	X	X	X	X	X	X	X	X
Stratagene																		
Robo-Cycler	MP	V	V	X	V	V	V	V	V	V	V	V	V	V	V	V	V	X
MX3000P	RP	V	V	V	V+	X	X	V	V	V	X	X	X	V	V	V	V	X
MX3005P	RP	V	V	V	V+	X	X	V	V	V	X	X	X	V	V	V	V	X
MX4000		V	V	V	V	X	X	V	V	V	X	X	X	V	V	V	V	X
Roche																		
LightCycler 480	LP	X	X	X	X	X	Va	X	X	X	Va	Va	Va	X	X	X	X	Va
LightCycler	LP	X	X	X	X	X	Va	X	X	X	Va	Va	Va	X	X	X	X	Va
Cyber		RP	RP	RP	HP		LP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP

Red = Low Profile cycler (96 x 0.1)
 Blue = To be released during 2009
 LP = low profile 0.1 ml
 RP = Regular Profile

HP = High Profile
 MP = Accept all profiles
 V = Fits
 V+ = Most optimal

Vc = Can be cut to fit
 Va = Requires adaptor to fit
 X = Does not fit

Cycler	Strips with Attached Caps				Plates											Plates 384 Format	
	CF78201	B79201	B72811	B72911	B70501	AB70651	B60101	B70651	B70671	AB17500	AB19800	B71501	B50501	B50651	B17489	B70515L	B71519L
	RP	HP	LP	RP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP		
ABI																	
2400	V	V	X	V	Vc	X	X	X	X	X	X	Vc	Vc	Vc	X	X	X
2700	V	V	X	V	V	X	X	V	X	V+	X	V	V	V	X	X	X
2720	V	V	X	V	V	X	X	V	X	V+	X	V	V	V	X	X	X
5700	V	V	X	V	V	X	X	V	X	V	X	V	V	V	X	X	X
7000	V	V	X	V	V	X	X	V	X	V	X	V	V	V	X	X	X
7300	V	X	X	V	V	X	X	X	X	V+	X	V	V+	V+	X	X	X
7500	V	X	X	V	V	X	X	X	X	V+	X	V	V+	V+	X	X	X
7500 Fast	X	X	Va	X	X	X	X	X	X	X	V+	X	X	X	X	X	X
7700	V	X	X	V	V	X	X	X	X	V+	X	V	V	V	X	X	X
7900	X	X	X	Va	X	X	X	X	X	V	X	V	V	V	X	V+	X
7900 Fast	X	X	Va	X	X	X	X	X	X	X	V+	X	X	X	X	X	X
9600	V	V	V	V	V	X	X	V	X	V+	X	V	V+	V+	V	X	X
9700	V	X	X	V	V	X	X	V	X	V+	X	V	V+	V+	X	V+	X
9800 Fast	X	X	V	X	X	V	V	X	X	X	V+	X	X	X	V	X	X
StepOne	X	X	V	X	X	Vc	Vc	X	X	X	X	X	X	X	Vc	X	X
StepOne Plus	X	X	V	X	X	V	V	X	X	X	V+	X	X	X	V	X	X
Veriti	V	X	X	V	V	X	X	V	X	V+	X	V	V+	V+	X	V+	X
Veriti Fast	X	X	V	X	X	V	V	X	X	X	V+	X	X	X	X	X	X
Biometra																	
Tpersonal	V	V	V	V	Vc	Vc	X	X	X	X	X	V	Vc	Vc	X	X	X
T1	V	V	V	V	V+	V	V	V	V	X	X	V	V	V	V	V	V
Tgradient	V	V	V	V	V+	V	V	V	V	X	X	V	V	V	X	X	X
T3000	V	V	V	V	Vc	X	X	X	X	X	X	V	Vc	Vc	X	X	X
Tprofessional	V	V	V	V	V+	V	V	V	V	X	X	V	V	V	X	V	V
Trobot	V	V	V	V	V+	V	V	V	V	X	X	V	V	V	V	V	V
BioRad																	
GeneCycler	V	V	X	V	Vc	X	X	V	X	X	X	Vc	Vc	Vc	X	X	X
iCycler	V	V	X	V	V	X	X	V	X	X	X	V	V+	V+	X	V	V
iCycler IQ	V	V	X	V	V	X	X	V	X	X	X	V	V+	V+	X	V	V
IQ5	V	V	X	V	V	X	X	V	X	X	X	V	V+	V+	X	X	X
MyCycler	V	V	X	V	V	X	X	V	X	X	X	V	V+	V+	X	X	X
MyIQ	V	V	X	V	V	X	X	V	X	X	X	V	V+	V+	X	X	X
Ptc100	V	V	V	V	V	V	V	V	V	X	X	V	V	V	V	V	V
Ptc150	X	X	V	V	X	X	X	X	X	X	X	X	X	X	X	X	X
Ptc200	V	V	V	V	V	V	V	V	V	X	X	V	V	V	V	V	V
Ptc225	V	V	V	V	V	V	V	V	V	X	X	V	V	V	V	V	V
Opticon	X	X	V	X	X	V	V	V	V	X	X	X	X	X	V	X	X
Opticon2	X	X	V	X	X	V	V	X	V	X	X	X	X	X	V	X	X
MiniOpticon	V	V	V	V	Vc	X	Vc	X	X	X	X	Vc	Vc	X	X	X	X
Chromo4	V	V	V	V	V	V	V	V	V	X	X	V	V	V	V	X	X
C-1000	X	X	V	X	X	V	V	X	V	X	X	X	X	V	V	X	X
F-1000	X	X	V	X	X	V	V	X	V	X	X	X	X	V	V	X	X
CFX96	V	X	V	V	V	V	V	V	V	X	X	V	V	V	V	X	X
CFX384	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	V	V
Eppendorf																	
MasterCycler	V	V	V	V	V	V	V	V	V	X	X	V	V	V	V	X	X
MC Gradient	V	V	V	V	V	V	V	V	V	X	X	V	V	V	V	X	X
MC ep Gradient	V	V	V	V	V	V	V	V	V	X	X	V	V	V	X	X	X
MC ep Gradient S	V	V	V	V	V	V	V	V	V	X	X	V	V	V	X	V	V
MC ep Realplex	V	V	V	V	V	V	V	V	V	X	X	V	V	V	X	V	V
MC Personal 16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stratagene																	
Robo-Cycler	V	V	X	V	V	V	V	V	V	X	X	V	V	V	X	X	X
MX3000P	V	X	X	V	V	X	X	V	X	X	X	V	V	V	X	X	X
MX3005P	V	X	X	V	V	X	X	V	X	X	X	V	V	V	X	X	X
MX4000	X	X	X	V	V	X	X	V	X	X	X	V	V	V	X	X	X
Roche																	
LightCycler 480	X	X	Va	X	X	Va	Va	X	X	X	X	X	X	X	V+	X	V+
Lightlyper	X	X	Va	X	X	Va	Va	X	X	X	X	X	X	X	V+	X	V+
Cycler																	
	RP	HP	LP	RP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP		

Closures for qPCR (8 strips) 1, B57801 EU Wide Optical 8-Cap Strip
2, B79701 EU Optical 8-Cap strip
3, 157300 Optiseal
Closures for PCR All strip caps and seals

384 well (q)PCR plates for Roche, ABI & Bio-Rad cyclers.. Continuation of page 1

BIoplastics BPLPM technology (BIoplastics particle mix) is inert for the (q)PCR process. In addition these particles by nature increase signal to noise ratio's in Real Time PCR applications. All 384 well plates are permanently, laser marked with a unique ID, wells are laser marked A to P and 1-24 and also available with additional laser barcodes. Plates are available in natural and white color where white is preferred in all qPCR procedures due to increased signal noise ratio. The plates fit all model 384 well (q)PCR cyclers.

More info at: www.bioplastics.com



New Release.

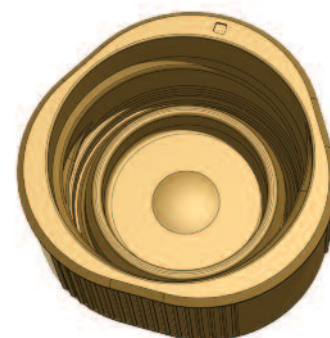
Easy Closure Cap for Screw Cap Tube range (- 200 °C – +100 °C)

BIoplastics recently released the new Easy Closure Screw Cap. BIoplastics initially introduced its innovative screw cap tubes, which can be used over the impressive temperature range of - 200 °C – +100 °C, back in 2008.

Due to the fact that some customers prefer "Easy Closure-one-hand opening" of screw cap tubes, BIoplastics has designed a Easy Closure Cap for the Screw Cap tube range. Customers can now opt for either Regular Closure or Easy Closure. For robust applications such as long term storage: ≥ 3 years below - 60 °C or incubation at ≥ 95 °C for ≥ 2 hours, one should opt for the regular closure caps. For less robust applications: ≤ 3 years higher than -60 °C or less stringent incubation ≤ 100 °C ≤ 1.5 hours, one can opt for the Easy Closure Cap. Both types of caps incorporate BIoplastics' non leaking Smart Closure Cap Technology.

The Easy Closure Cap is also produced from a completely different material. All types of screw caps and screw tubes are offered in 10 different colors, DNase, RNase, Pyrogen, Metal and ATP free.

More information and the latest flyers can be can be obtained at www.bioplastics.com.



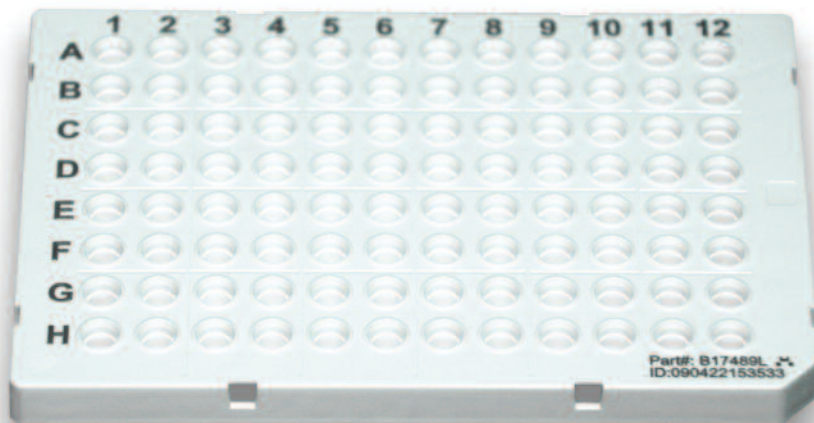
Micro particles in BIOplastics products, BPLPM Technology

BIOplastics announces the incorporation of micro particles in its (q)PCR products. The BPLPM technology (BIOplastics particle mix) products will be offered in addition to the regular range of (q)PCR products. While not interfere in the (q)PCR process, these particles -by nature- increase signal to noise ratio's in Real Time PCR applications. BPLPM enables irreversible, non removable IN PRODUCT labeling and identification. Contrary to others who are using ink, stamps, dyes containing organic solutions or stickers, BIOplastics' BPLPM technique result in a non removable, uniquely marked and coded product.

No writing with markers, no mistakes, no removal of marks, no double identification numbers, just use the unique ID# at the beginning of your process. Link the unique ID to your Lab LIMS system and samples. BPLPM technology is used in a selected range of products and will be extended in the future and on demand.

BIOplastics' BPLPM technology is particular useful for accredited labs and in Pre-diagnostics and Diagnostic settings allowing improvement of their procedures and reducing risk of label failures. Custom layouts and customized codes are, depending on volume, available. These options are useful for kit manufacturers to enable them to effectively trace products and applications.

More information?? Send an e-mail to: support@bioplastics.com or contact our headquarters in The Netherlands.



BIOplastics Roche LC 480 qPCR plates featuring BPLPM technology resulting in unique ID as well as superior performance.



5 µl Nano tip and Nano Gradient Filtertip release

BIOplastics recently released its Nano Tip and Nano Gradient Filtertips. The Nano Tip is quite popular and actually kind of a hybrid in the world of pipettes. It is specifically designed to pipette low volumes and its pipette shaft uptake part enables a lot of commonly used pipettes to fit. The Nano Tip does fit Gilson, Eppendorf, Finn, Biohit Oxford and many other brands and models. Tips are manufactured from medical grade polypropylene with very low binding and adhesion properties. Filtertips are equipped with BIOplastics gradient 18 micron filter which is the most optimal balance between superior protection and accurate pipetting.

All BIOplastics Nano Tips are DNA(se), RNA(se), Pyrogen, Protein and ATP free. Filtertips are also sterile.

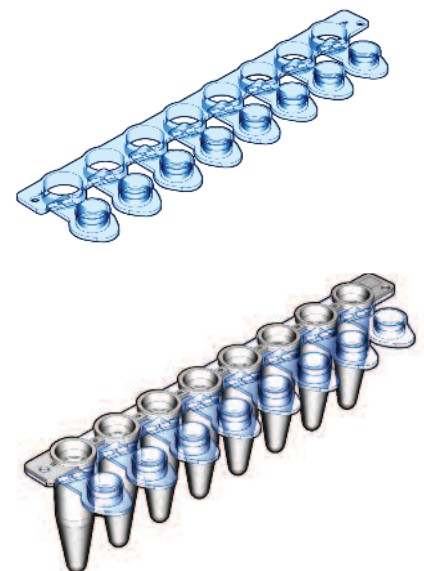
Click-on Cap™ strip allows individual cap closure of (q)PCR tube strips.. Continuation of page 1.

With the increase of (diagnostics) qPCR kits the demand for limiting cross contamination has increased. The closure and opening with strips caps and/or seals is sensible for cross contamination.

Although BIOplastics is offering 4 types of 8- tube-strips with single attached caps, the new Click-on 8-cap strips does add an important feature to the existing range.

"Clicking" the EU 8-Single Attachable Indented Cap to either BIOplastics low profile or regular profile 8 tube-strips enables full flexibility in composing colored 8- tubes-strips with natural clear single attachable optical caps. In most cases this feature is used as a combination of white 8 tube-strips and optical clear flat caps. Click-on Caps™ can be used in combination with BIOplastics (q)PCR strips type B79601-B77001-B77101-B79901.

These combinations will work in all ABI, Bio-Rad and Roche LC 480 Real Time and Real Time fast cyclers. Some combinations require the use of an adaptor. (See www.bioplastics.com)



Normalized SOP's for (q)PCR applications, how easy can that be?

Many laboratories have SOP (Standard Operation Procedures) in place. Incorporation of new components in SOP's are generally labor and time consuming. In the (q)PCR process, variables as cyclers, plastic disposables, kit components and work procedures are typically described and incorporated in SOP's. Often different SOP's in place for one application are used on several (different) cyclers. BIOplastics and CYCLERtest® have formulated a strategy which enables exclusion of the cycler as well as the used disposable variable. This strategy actually provides users the ability to normalize their SOP.

How does it work??

Since BIOplastics manufactures the widest and most uniform range of (q)PCR disposables which fit any brand or model of (q)PCR cyclers, and since BIOplastics produces its products identical in raw material properties, and uniformity, one can exclude the disposable variation by using BIOplastics disposables. So instead of using a variety of disposables from different vendors, compositions and tube designs, required to fit your cycler range you could opt for one source (BIOplastics) only. Your disposables will then have exactly the same properties for different models of cyclers. By doing so one can exclude differences in disposables. Combine this knowledge with the CYCLERtest® calibration service or the purchase of a Driftcon® system which enables you to "fingerprint" your cycler thereby excluding the cyclers variable.

So how do you normalize your SOP:

- A: categorize your most sensitive (q)PCR protocol
- B: Select your best cyclers which gives you superior results
- C: Select the BIOplastics (q)PCR disposable which fits your best, superior result cycler
- D: Perform the same test to assure that the BIOplastics product is working on your "best cycler"
- E: Calibrate (Driftcon® or MTAS® service) your best cycler and define its temperature fingerprint.
- F: Calibrate (Driftcon® or MTAS® service) all other cyclers and define their temperature fingerprint.
- G: You have now the translation of temperature between all your cyclers
- H: Modify you cycler protocol (temperature) to match your best cycler fingerprint
- I: Purchase the required specific disposable for your other cyclers from BIOplastics assuring the same raw material composition and properties

RESULT:

A UNIFORM SOP WHICH ASSURES IDENTICAL RESULTS REGARDLESS OF THE CYCLER USED

Problems in defining uniform SOP'S? Just let BIOplastics or CYCLERtest® know and we guide you through this CONVENIENT solution!!



Normalized SOP's in practice

Assume Cycler 1 gives you the best results in your most sensitive application. Select a BIOplastics consumable which fits cycler 1 and run your most sensitive application. Your results should be the same or superior. If not optimize until you have the same result temperature fingerprint all cyclers by means of Driftcon® or MTAS®. (15 channel dynamic 2 Hz measurement)

In this example we call the fingerprint of Cycler 1: X

Determine the relationship between the cyclers and normalize the other cyclers (2-5) to cycler 1 by adjustment of the programmed protocol for temperature and time for each plateau:

Example the denaturation temperature was programmed: 95 degrees and actually measured was 94.5 °C= X

so if Cycler 1= X and Cycler 2= X - 0.3°C, Cycler 3= X + 0.6°C, Cycler 4= X - 0.9°C, Cycler 5= X + 0.3°C

then you should adjust and normalize the other cyclers for denaturation temperature as below:

Cycler 2: denature temperature to be programmed: 95.3 °C

Cycler 3: denature temperature to be programmed: 94.4 °C

Cycler 4: denature temperature to be programmed: 95.9 °C

Cycler 5: denature temperature to be programmed: 94.7 °C

Now select any BIOplastics consumable which fit one or all cyclers (1-5)

You have now normalized your SOP and can run your sensitive application on all machine without compromising results!!